

# IMPORTANT REQUIREMENTS FOR EGRESS WINDOWS

## FLORIDA BUILDING CODE 5<sup>th</sup> EDITION, RESIDENTIAL SECTION R310 EMERGENCY ESCAPE AND RESCUE OPENINGS

### R310.1 Emergency escape and rescue required.

- Every sleeping room shall have at least one operable emergency escape and rescue opening.
- The net clear opening dimensions required by this section shall be obtained by the normal operation of the emergency escape and rescue opening from the inside.
- Emergency escape and rescue openings with a finished sill height below the adjacent ground elevation shall be provided with a window well in accordance with Section R310.2.
- Emergency escape and rescue openings shall open directly into a public way, or to a yard or court that opens to a public way or into a screen enclosure, where a screen door is provided leading away from the residence.

**R310.1.1 Minimum opening area.** All emergency escape and rescue openings shall have a minimum net clear opening of 5.7 square feet.

[\*5.7 sq. ft. less 5% (0.28 sq. ft.) = minimum 5.42 sq. ft.]

**Exception:** Grade floor openings shall have a minimum net clear opening of 5 square feet.

[\*5.0 sq. ft. less 5% (0.25) = minimum 4.75 sq. ft.]

**R310.1.2 Minimum opening height.** The minimum net clear opening height shall be 24 inches.

[\*24 inches less 5% (1 3/16 inches) = minimum 22 13/16 inches.]

**R310.1.3 Minimum opening width.** The minimum net clear opening width shall be 20 inches.

[\*20 inches less 5% (1 inch) = minimum 19 inches.]

**R310.1.4 Operational constraints.** Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys, tools or special knowledge.

**[\* NOTE: The Florida Building Code 5<sup>TH</sup> Edition, Section 704.1, Allows for a MAXIMUM of 5 percent reduction in the required net clear opening dimensions of replacement doors and windows.]**

**COMMENTARY** – *Because so many fire deaths occur as a result of occupants being asleep in a residential building during a fire, the code requires that all basements, habitable attics and sleeping rooms have windows or doors that may be used for emergency escape or rescue. The requirement for emergency escape and rescue openings in sleeping rooms exists because a fire will usually have spread before the occupants are aware of the problem, and the normal exit channels may be blocked.*

*Openings required for emergency escape or rescue must be located on the exterior of the building so that rescue can be performed from the exterior. Alternatively, occupants may escape through that opening to the exterior of the building without having to travel through the building itself. Therefore, where openings are required, they should open directly into a public street, public alley, yard or court.*

*The dimensions prescribed in the code for exterior wall openings used for emergency egress and rescue, are based, in part, on extensive testing by the San Diego Building and Fire Departments to determine the proper relationships of the height and width of window openings to adequately serve for both rescue and escape. The minimum of 20 inches for the width is based on two criteria: the width necessary to place a ladder within the window opening and the width necessary to admit a fire fighter with full rescue equipment, including a breathing apparatus. The minimum 24-inch height is based on the minimum size necessary to admit a fire fighter with full rescue equipment. By requiring a minimum net clear opening size of 5.7 square feet, the code provides for an opening of adequate dimensions. To be accessible from the interior of the sleeping room, attic, or basement, the emergency escape and rescue opening cannot be located more than 44 inches above the floor. The measurement is to be taken from the floor to the bottom of the clear opening.*

*The required opening dimensions must be achieved by the normal operation of the window, door or hatch from the inside without the use of keys, tools or special knowledge. It is important to keep in mind that no special knowledge for operation of the egress window is a key operational constraint. It is impractical to assume that all occupants can operate a window that requires a special sequence of operations to achieve the required opening size. Although most occupants are familiar with the normal operation to open the window, children and guests are frequently unfamiliar with the special procedures necessary to remove the sashes. The time spent comprehending special operations unnecessarily delays egress from the bedroom and could lead to panic and further confusion. **Thus, windows that achieve the required opening dimensions only by performing special sequence of operations, such as removal of sashes or mullions, are not permitted.** For example, if a specific area of the window has to be depressed or manipulated to allow the sash to be removed or released to achieve the open area requirement of 5.7 square feet, the window does not qualify as an egress window.*